# KEELADI EXCAVATIONS
## TIRUPUVANAM TALUK, SIVAGANGAI DISTRICT, TAMIL NADU
## (2014-15 & 2015-16)

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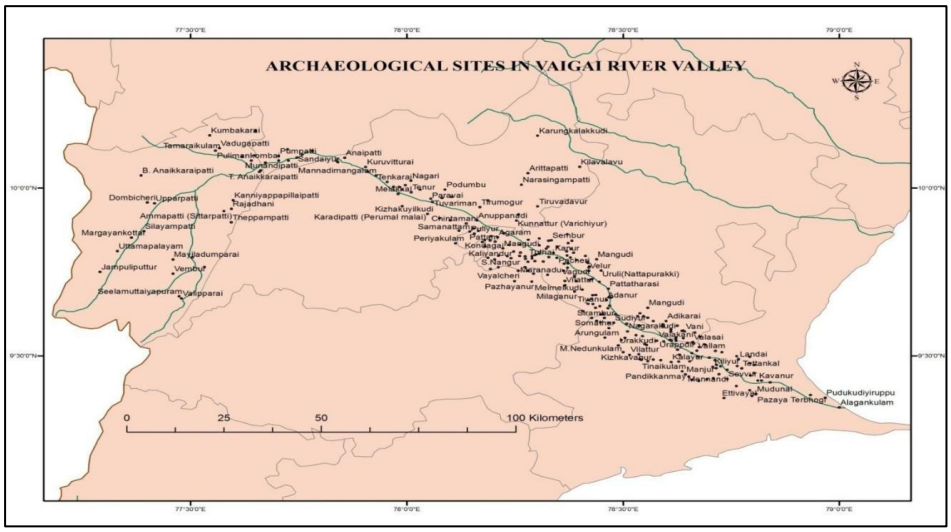
The office of Superintending Archaeologist, Excavation Branch VI, Bangalore during the season 2013-14 undertook exploration of archaeological sites and remains in Vaigai river valley comprising the Theni, Madurai, Sivagangai and Ramanathapuram districts in Tamil Nadu for the season. The objective of the programme was to explore archaeological sites and remains along Vaigai river valley and identify suitable site for systematic excavation to understand the cultural transformation of Tamil Nadu occurred during various periods and southern Tamil Nadu in particular.

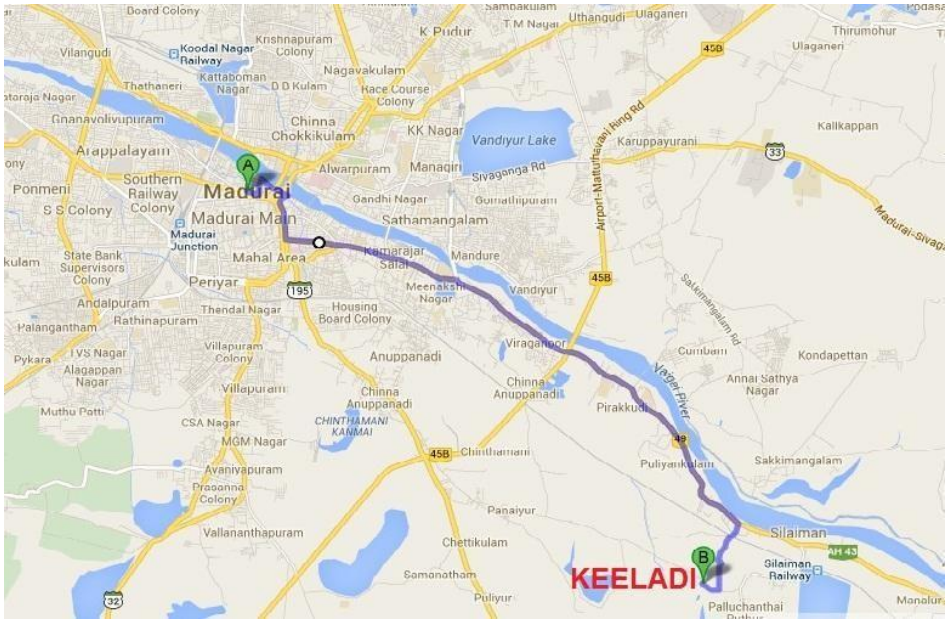
Vaigai is one among the sacred rivers and the major lifeline for southern Tamil Nadu. It originates near Vellimalai in the Western Ghats and traverses through Theni, Madurai, Sivagangai and Ramanathapuram districts before debouching itself into the Bay of Bengal near the historic port city of Alagankulam. In spite of having immense archaeological wealth, the Vaigai river valley remains neglected for any intensive excavation till date.




As part of the exploration programme, about 293 sites all along the Vaigai river valley with various forms of antiquarian remains have been identified and documented. Many of these sites face threat of being get destroyed due to rapid

agricultural expansion and urbanization. Out of these, the site of Keeladi was identified for systematic excavation having potent archaeological wealth that may provide crucial evidences to understand the missing links of Iron Age to early historic period and subsequent cultural developments.

The site of Keeladi (09° 51' 40" N, E 078° 11' 70" E) is located about 12 kilometres south east of Madurai on the ancient highway (modern NH 49) leading to Ramesvaram via Tiruppuvanam. The village is strategically located on the south bank of river Vaigai and is surrounded by various historical places like Kondagai, Manalur etc. The historicity of the village is very well attested by the presence of archaeological mound within the village encompassing the ancient settlements of Kondagai, Manalur, Pallichandai.




The impressive habitation mound spread in an area of about 100 acres with 4.5 km in circumference is located 1 km to the southeast of present Keeladi village and to the west of Manalur irrigation tank. The mound is locally known as ***'Pallichandai Thidal'*** (i.e. mound at Pallichandai) ***or 'Mettu Punjai'*** (i.e. elevated ground land). The mound raising of about 2.88 meters from the ground level is relatively undisturbed in spite of being used as coconut grove. The whole area is littered with fine to crude variety of black and red ware, black ware, red slipped ware, red ware, coarse red ware having decorations, incised patterns in various forms. Antiquities like terracotta discs, beads, pestles, querns etc have been frequently met while tilling the land.

The whole area encompassing Keeladi and Kondagai villages was referred as '***Kuntidevi Chaturvetimangalam***' in the c. 12$^{th}$ - 13$^{th}$ AD later Pandyan

inscriptions in the territorial unit of '***Velur Kulakkizh***' i.e. the village located within the water spread of Velur tank fed by Vaigai river. The name Keeladi is derived for its location lying to the east of '***Kuntidevi Chaturvetimangalam***'.

The antiquity of Kondagai village dates back to Iron Age for the discovery of burial complex located between the Ayyanar temple and the water tank containing numerous urn burials. They belong to the class of simple pit burials by interring the urn with or without lid directly within the pit cut for the purpose. The burial goods contain various forms of black and red ware, black ware, red ware kept along with select bones, teeth of the deceased. The finding of white painted black and red ware and black painted red ware is an interesting and rare feature found with the urn burials. The proximity of the urn burial complex not far from the habitation mound (***mettupunjai***) at Keeladi leads to surmise that it could have remained as its associated burial complex.

In spite of having potent archaeological sites and remains scattered all along the Vaigai river valley, there is hardly any serious attempt made till date to ascertain the cultural developments that took place in different periods. Apart from the sporadic diggings made at the urn burial sites of Anuppanadi and Paravai near Madurai by Alexander Rea (1888), T. Kalluppatti (1976) by ASI, Kovalanpottal (1980), Alagankulam (1986) and the limited diggings much recently done at Mangulam (2006) by Tamil Nadu State Archaeology Department there is hardly any attention paid to understand the potent archaeological wealth of Vaigai river valley.

Thus, with the above backdrop and also keeping in view the archaeological importance of the site dating from Iron Age, the Excavation Branch VI, Bangalore carried out first season (2014 -15) archaeological excavation at the site of Keeladi. The initial work has revealed early historic remains datable to c. 3rd BC – 10th AD. The date of c. 10th AD is assigned on the basis of surface collection of copper coin of Rajaraja I earlier found near the site. Two different localities within the mound namely Locality-1 and Locality-2 were identified and subjected to large scale spade work to ascertain the nature of the settlement and also the cultural sequence, transformation etc.

## Excavation at Keeladi 2014-15

### Locality-1

Locality-1 lie on the eastern slope of the mound and to the west of Manalur water tank. About 21 quadrants were opened horizontally to expose the cultural deposit which subsequently revealed predominantly early historic remains ranging from 2.50 to 2.80 meters in six layers with the survival of early medieval remains in the upper most level.

**General View of excavated trenches in Loc-I (2014-15)**

The significant finding in this locality was the evidence of structural activity in brick datable to early historic period. Judging by the brick size and stratigraphic position of the structure, it is probable to ascertain its date to the late phase of the early historic period.

**Exposed brick structure in Loc-I (2014-15)**

The extant portion revealed the possibility of a square shaped structure of about 1 meter in height paved with brick flooring. The occurrence of grooved roof tiles along with it is suggestive of a roofed super structure. A similar structure identifiable as a storage tank was also exposed in the nearby quadrant. Besides the above, the other activity noticed in the area is the presence of numerous trash pits purposefully dug into the natural soil.

The notable antiquities recovered in this area comprised of iron nails, spear heads, bone points, spindle whorls, terracotta figurines, legged saddle quern, stone pestle, terracotta beads, glass beads, semi-precious stone beads, shell bangles, terracotta ear lobes etc.

**Keeladi - Semi-precious stone beads (2014-15)**

**Keeladi - Shell bangles (2014-15)**

The pottery repertoire consisted of coarse red ware in the upper level while the lower levels predominated by fine to medium fabric black and red ware, black ware, red slipped ware and coarse red ware. The russet coated red ware as well as in black and red ware is seen as an intrusive element in limited numbers.

**Russet coated painted ware sherds (2014-15)**

**Russet coated pot sherd with graffiti (2014-15)**

Besides, the occurrence of white painted black and red ware in proper stratigraphic context in considerable quantity in this locality is an interesting feature. The paintings are executed in series of 'dots' or 'dash' in the neck portion of bowls and vases. In addition to this, this locality has also yielded good number of graffiti sherds both single as well as in composite form. Among various post firing graffiti marks, the occurrence of single / double arrow mark variety predominates the others.

**Locality-2**

Locality-2 lie on the top most part of the mound on the west away from Locality-1. The contour survey measured a maximum height of the mound in this locality about 2.88 meters from mean sea level. To understand the cultural sequence of the site, about 22 quadrants were subjected to spade work, which revealed a maximum cultural deposit of 4.40 meters.

**General View of Excavated Trenches in Loc-II from western side (2014 -15)**

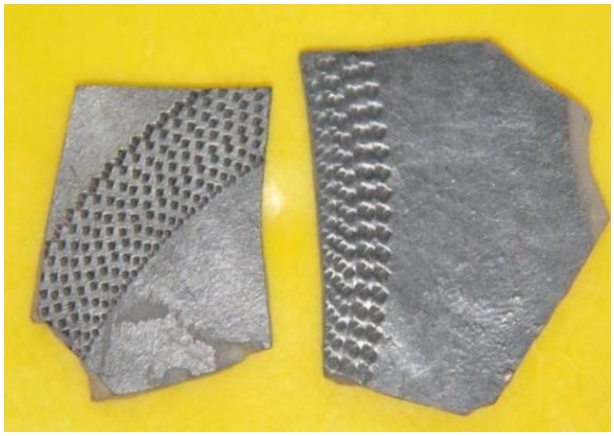
The stratification was observed to be similar to that of Locality – 1 with six or seven layers in total. A huge dump of about 1.5 meters depth was seen uniformly in most of the quadrants below the upper level suggesting the lower early historic levels were completely removed and refilled at a later date. Considerable amount of brick debris with grooved tiles found to be scattered in many of the quadrants suggest large scale structural activities carried out in this area.

**Keeladi – Exposed brick flooring with parallel walls in Loc-II (2014-15)**

The interesting feature found in this area of thick brick built rectangular structure, walls and portion of brick flooring set in mud mortar presumably forming part of a residential area. The size of the bricks used for the structures measured 32×21×5, 34×22×6, 36×22×5, 38×24×6 cm respectively. A terracotta ring well was found near the flooring on the same level. In addition to this, two more terracotta ring wells were also exposed at the lower levels in Locality-2.

**Keeladi – Close-up view of exposed ring well in Loc-II (2014-15)**

This locality evinced interesting finds like Rouletted pot sherds suggesting trade contacts maintained by this settlement with western world. These pot sherds are considered deluxe varieties and might have been reached here through traders. At a later date these varieties were imitated and manufactured locally at the site.



**Keeladi – Roulette pot sherds (2014-15)**

Besides the above, the locality also yielded antiquities like glass, terracotta beads, semiprecious stone beads like carnelian, quartz, terracotta figurines, spindle whorls, iron objects, copper antimony rods, bone points. The ceramic assemblage consisted of black and red ware, black ware and coarse red ware. Unlike Locality -1, the occurrence of white painted black and red ware and russet coated ware were found in limited numbers. Different form of graffiti marks was also noticed in various pot sherds. **Another important find during the excavation in this area was that of inscribed pot sherds having names of individuals** such as '***athan***', '***tisan***', '***uthiran*****'**, '***iyanai***' '***surama'*** **written in Thamizhi script over them.**

**Keeladi: Thamizhi inscribed potsherd 'ti sa n' (2014-15)**

**Keeladi: Thamizhi inscribed potsherd 'sat a n' (2014-15)**

On the basis of stratigraphy and also on paleographical grounds, these inscribed sherds may tentatively be dated to c. 1st cent. BC - c. 1st cent. AD.

Antiquities retrieved from the site include glass, carnelian, agate, quartz, glass, terracotta beads, ivory objects, ear ornaments, bone points, terracotta figurines, legged quern, various form of copper and iron objects, spindle whorl, terracotta disc, gamesmen etc. About 1800 no. of antiquities have been collected during the season 2014-15.

**Potsherd with fish symbol (2014-15)**

**Keeladi – Ivory Dice (2014-15)**

**Excavation at Keeladi 2015-16**

To understand the settlement pattern partly identified during the previous season (i.e. 2014-15) and to further trace the structural activities at the site, this season's excavation work has been concentrated at the highest part of the mound i.e. Locality-2. A total number of 59 quadrants have been opened to trace the continuity of structures exposed during the previous work and to confirm the nature of cultural deposit in this area.

On the whole, the spadework undertook in this area has revealed remains mostly confined to early historic period. The significant finding at Locality-2 (ext.) was that of two massive brick structures which seem to have formed part and parcel of a big residential complex.

**General View of Excavated Trenches in Loc-II from western side (2015-16)**

**Exposed brick structures after baulk removal in Loc-II (2015-16)**

In continuation to the brick flooring along with a ring well exposed in the previous season, a rectangular brick structure measuring 2.90 × 1.90 mtr was noticed (YF1/1). The extant portion of the structure consisted of 11 brick courses and extended to a depth of 1.50 mtr with brick flooring. Large quantity of grooved roof tiles recovered within the structure is suggestive of a roofed super structure.

To the west of the above structure, a massive brick structure roughly square in shape was also traced (YF1/2). With dimensions measuring 6.00 × 3.70 mtr it is evident that this structure had much larger functional importance in this area. The available evidences showed that it had at least two constructional phases. The main chamber on its northern wall has a square inlet / outlet like feature extending

towards north. Except that of its southern side, the structure had solid brick walls. The southern side instead of a wall had sloped brick flooring set within a rectangular enclosure which in turn had horizontal wall running towards south. This wall perhaps connects with the two horizontal walls identified in the last season work.

On the western side two thick walls running in east-west orientation has been partly exposed. The eastern side revealed pit activities containing various forms of pots in broken condition. The extant portion of the structure consisted of 23 brick courses and extended to a depth of 2.70 mtr with brick flooring.

The adjacent quadrants on either side have also revealed structural evidences in the form of paved channel, floor and a wall. One of the structures exposed on the eastern side (ZF1/3) revealed a channel like feature connected with a square enclosure. The floor of this structure was intentionally rammed with small pebbles up to a depth of 10 cm. Further excavation in whole of the area might reveal more structures to provide a better understanding of the main structure and its associated structures.

The western part of the mound seems to be the core area with high density of structures and associated features. Excavation work carried further west of the above area confirmed this fact. A series of quadrants taken in this area exposed many interesting structures hitherto unknown in the early historic phase of Tamil Nadu. Here almost each quadrant evinces some sort of structural activities. Out of the various structures found in this area, two of them strike importance in their form and findings. Both of them share similar rectangular shape in form varying only in dimension.

**Aerial View of exposed Brick Structures in Loc-II (2015-16)**

The first one (YF4/1) measured 2.15 x 1.98 mtr in size with 17 courses of bricks along with a brick flooring at a depth of 1.98 mtr. The finding of a channel like feature attached on its outer side indicates its possibility of being used for storage

or industrial purpose. This is strengthened by another partly survived paved channel exposed little away on the eastern side. This channel is connected with a big granite slab set in east-west orientation. The structure was further provided with brick flooring running in north-south orientation. The occurrence of large quantity of grooved roof tiles and post holes along the flooring is indicative of a roofed super structure. The most important finding made within the structure was that of a black and red ware bowl inscribed with two Thamizhi label inscriptions with post fired graffiti markings.

**Exposed brick structures facing eastern section in Loc-II (2015 -16)**

**Exposed brick structure with post holes in Loc – II (2015 -16)**

The other structure similar like that of the above was exposed little away on the western side (YF5/2). This structure measured 2.55 × 1.75 mtr in size with 25 courses of bricks along with brick flooring at a depth of 2.35 mtr. At the southern end of the quadrant another paved brick channel was found. This structure was again provided with brick flooring running in north-south orientation. Near this floor was exposed a part of big sized double walled hearth like feature in semi circular shape filled with ashy deposit.

Similar to above, this structure also yielded a black and red ware dish inscribed with Thamizhi label inscription. Along with this dish at the same level, a red slipped pot and a spouted basin in red ware were also collected. The finding of inscribed pot sherds within the structures is crucial as it provide firm date for the construction of the structures.

**Thamizhi inscribed black and red ware dish**
**'*ce n ta n a va (ta) thi*' (2015-16)**

In this area, almost all the quadrants have yielded structural activities in the form of walls, channels etc. Another interesting feature found here was that of the remains, reflecting the civic sense of the people in the form of terracotta pipes fixed with one another probably discharging the sewage water to the soakage jars. Two such soakage jars(?) were found with multiple pots kept one above another was found nearby the terracotta pipes. Its north end was found to be connected with a hemi spherical pot.

**Close-up view of exposed terracotta pipes (2015 -16)**

The uniform north-south orientation of all the structures associated with drains or channels found in the excavation is an intriguing aspect which requires further investigation. The total cultural deposit of the area during the current season ranged from 3.40 to 4.00 meters. The ceramic assemblage found in the excavations include coarse, medium and fine black and red ware, russet coated ware, white painted black and red ware, red slipped ware and coarse red ware, etc. Interestingly, the pits dug into the natural soil yielded finer varieties of black and red ware ceramic assemblage. The occurrence of roulette ware indicates long distance trade maintained by this settlement.

**Black and red ware and Black ware pots (2015-16)**

**Rouletted sherds (2015-16)**

Both fine and locally manufactured variety of roulette ware were collected during the excavation. The occurrence of about 40 inscribed pot sherds is another interesting aspect of the excavation. The pot sherds containing names of individuals such as '***sathan'***, ***'eravathan'***, '***santhan'***, '***madaici'*** '***santhan avathi'***, ***muyan***, ***perayan***, … ***kuviran kuravan***, '***perumuvar un***…', '***campan'***, written in Thamizhi script over them. The occurrence of some prakrit names in the pot sherds also deserves attention.

**Thamizhi inscribed potsherds (2015 -16)**

On the basis of stratigraphy and also on paleographical grounds, these inscribed sherds may be dated to c. 1st cent. BC - c. 1st cent. AD.

Antiquities retrieved from the site include glass, carnelian, agate, quartz, glass, terracotta beads, ivory objects including combs, ear ornaments, bone points, terracotta figurines, legged quern, coins, various form of copper an iron objects, spindle whorl, terracotta disc, gamesmen and terracotta seal etc. About 4000 nos of antiquities have been collected during the second season.

**Ivory Combs (2015-16)**

**Stone weights (2015-16)**

Further investigation shall likely to reveal not only the cultural developments took place at the site but also the factors led to the formation of early historic phase in Vaigai valley and southern Tamil Nadu on the whole. The findings will further lead us for a better understanding about the historicity of the celebrated city of Madurai.

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